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March 2, 2012

Mr. Ramon C. Mendoza
On-Scene Coordinator
Emergency Response Branch
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard,
Chicago, Illinois

Subject: **Final Letter Report**
Polychem Services, Inc. (Polychem Services), Site Emergency Response
Chicago Heights, Cook County, Illinois
Technical Direction Document No.: S05-0001-1202-001
Document Control No.: 1733-2A-AUHM
Contract No.: EP-S5-06-04

Dear Mr. Mendoza:

The Weston Solutions, Inc. (WESTON®), Superfund Technical Assessment and Response Team (START) prepared this letter report in accordance with the tasks outlined in Technical Direction Document (TDD) No. S05-0001-1202-001. The scope of this TDD was to conduct support activities for the emergency response (ER) performed at the Polychem Services site at 374 East Joe Orr Road in Chicago Heights, Cook County, Illinois (the Site; **Figure 1** in **Attachment A**). Specifically, the United States Environmental Protection Agency (U.S. EPA) directed WESTON START to perform the following activities:

- Prepare a site-specific health and safety plan (HASP)
- Document ER activities
- Conduct air monitoring for respiratory hazards
- Prepare photographic documentation of Site conditions and ER activities (**Attachment B**)
- Prepare and deliver this Final Letter Report documenting the ER

This letter report discusses the Site location, Site background, and ER activities, and presents conclusions based on the ER.

SITE LOCATION

The Site is located at 374 East Joe Orr Road in Chicago Heights, Cook County, Illinois, approximately 0.3 mile south of Joe Orr Road on an unnamed access road (**Figure 1** in **Attachment A)**. The Site's geographical coordinates are 41° 30' 56.34" North latitude and 87° 37' 26.56" West longitude. The Site occupies approximately 4 acres and contains a chemical

conversion facility occupying approximately 25,000 square feet (**Figure 2** in **Attachment A; Photograph No. 1** in **Attachment B**). The Site is bordered to the north by an Esmark Steel Group manufacturing facility; to the east by a railroad track and undeveloped land; to the south by a railroad track, undeveloped land, a vacant lot, and an industrial facility; and to the west by an access road, an Ace Hardware paint manufacturing facility, a railroad, and Joe Orr Woods, a Cook County forest preserve. The closest residential homes are located approximately 0.36 mile southwest of the Site. The closest waterway is Thorn Creek approximately 0.35 mile west of the Site. A drainage ditch borders the Site to the west and runs north-south along the access road.

SITE BACKGROUND

Heartland Polymer, Inc. (Heartland Polymer), owned and operated the Site until May 2008, when Polychem Services purchased the buildings and equipment (such as tanks, reactors, instrumentation, etc.) housed at the Site. Chemical processes conducted by Polychem Services have included condensation reactions, free radical polymerization, and Lewis acid alkylation reactions. Products produced by Polychem Services at the Site have included polyesters, alkyl resins, acrylic resins, and thermal-pressure addition resins. Polychem Services is working with Chemtech Services, Inc. at the Site and currently reprocesses saturated amine scrubber solutions (amine sulfate solutions) into pure amines for reuse in the foundry industry as part of its daily operations.

U.S. EPA inspected the Site in August 2010 and identified over 800 containers of hazardous and non-hazardous waste materials in steel drums and plastic totes, many of which contained ignitable and corrosive liquids and solids. The Site is under investigation by U.S. EPA for potential violations under the Resource Conservation and Recovery Act (RCRA).

On January 18, 2012, the U.S. EPA and WESTON START visited the Site and found that hundreds of drums remained at the Site. These drums contained ignitable resins, spent non-halogenated solvents, corrosives, lime sludges, and numerous unknown liquids and solids. Some of the drums and containers were eroding, and their contents appeared to have leaked onto the ground.

On January 25, 26, and 27, 2012, the U.S. EPA conducted a Site Assessment under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, also known as Superfund, to determine if the on-site containers presented imminent and substantial threats to the public health or welfare of the United States or the environment. The U.S. EPA and WESTON START documented the presence of 592 drums, 53 totes, and 26 cubic-yard containers belonging to Heartland Polymer, in the west and northwest regions of the Site (**Figure 2** in **Attachment A**). Of the 671 containers found, 59 were leaking and 46 were open. Furthermore, 207 containers were labeled “Hazardous,” “Flammable,” or “Corrosive,” and 313 containers were unlabeled or had illegible labels. Surface water containing oily product and sheen was observed flowing from an area where the drums were staged in the northwest region of the Site to an adjacent off-site storm sewer. WESTON START collected waste liquid

samples from three leaking drums that confirmed the presence of ignitable and toxic hazardous wastes according to Title 40 of the *Code of Federal Regulations*, Part 261, Subpart C. The analytical results for leaking drums that exceeded the regulatory limits are shown below. **Table 1** in **Attachment C** summarizes all the analytical results for leaking containers.

	Field Sample ID	**PS-WL11-012612**	**PS-WL12-012612**	**PS-WL13-012612**
	Matrix	**Waste Liquid**	**Waste Liquid**	**Waste Liquid**
	Sampling Date	**1/26/2012**	**1/26/2012**	**1/26/2012**
	Regulatory Limit			
Flashpoint (°F)	< 140	**84**	**108**	**120**
TCLP VOCs (mg/L)				
2-Butanone	200	**800**	5000 U	5000 U
Benzene	0.5	**700**	500 U	500 U

Notes:
1) Shaded and bolded results exceed the hazardous waste regulatory limits in Title 40 of the Code of Federal Regulations, Part 261, Subpart C.
2) Only positively detected TCLP VOC parameters displayed

< = Less than
°F - Degree Fahrenheit
mg/L = Milligrams per liter
ID - Identification
TCLP = Toxicity Characteristic Leaching Procedure
U = Non-detect
VOC = Volatile organic compound

In addition, a surface water sample confirmed the presence of volatile organic compounds (VOC) in water flowing off the Site into the adjacent storm sewer. A Site Assessment Report was prepared that provides further details of this investigation.

The leaking drums identified during the site assessment are a release of hazardous substances, pollutants, or contaminants that may present imminent and substantial threats to the public health or welfare of the United States or the environment.

On January 30, 2012, U.S. EPA issued a verbal notice under CERCLA to representatives of Polychem informing the facility that unless it responds quickly and adequately, the U.S. EPA plans to take actions to address the release or threat of release of hazardous substances, pollutants or contaminants, including toxic and flammable hazardous waste at the Site. Polychem responded that they could respond in a timely manner.

EMERGENCY RESPONSE ACTIVITIES

(NOTE: Response Activities taken by Polychem, its contractors, and subcontractors were taken at the direction and oversight of the U.S. EPA On-Scene-Coordinator supported by his WESTON START contractor).

On February 1, 2012, at approximately 8:30 a.m., U.S. EPA On-Scene Coordinator (OSC)

Mendoza and WESTON START arrived at the Site and met with Polychem Services representatives. Polychem Services had installed a soil berm and an absorbent boom along the northwest fenceline of the Site where surface water runoff from the northwest drum staging area had been flowing into a storm sewer (**Photograph No. 2** in **Attachment B**). Polychem Services also applied Oil-Dri to an area where oily product had been accumulating around leaking and open drums (**Photograph No. 3** in **Attachment B**). WESTON START used spray paint to mark and document all leaking, open, and damaged drums and totes in the west and northwest regions of the Site.

On February 3, 2012, at approximately 8:00 a.m., U.S. EPA and WESTON START arrived at the Site and met with representatives from Polychem Services; Polychem Service's cleanup contractor, EMCO Chemical Distributers, Inc. (EMCO); and EMCO's subcontractor, R3 Environmental. R3 Environmental used a forklift to place 52 leaking 55-gallon steel drums, 2 leaking 30-gallon polyethylene (poly) drums, and 4 damaged 55-gallon steel drums into 85-gallon steel overpack drums (**Photographs No. 4** and **5** in **Attachment B**). **Table 2** in **Attachment C** presents a table of all overpacked drums, and **Figure 3** in **Attachment A** summarizes the locations and containers secured.

WESTON START conducted air monitoring for VOCs during all ER operations using a MultiRAE photo-ionization detector (PID) and marked each overpack drum with identification information. At 1:40 p.m. on February 3, R3 Environmental accidentally spilled the contents of an unlabeled leaking drum. The facility operator from Chemtech, Mr. Tom Riggins reported that the material was non-hazardous, under-reacted phenolic resin. WESTON START used the PID to monitor air near the spill and did not detect VOCs above the background level. R3 Environmental bermed and covered the spill with Oil-Dri absorbent, allowed the liquid to be absorbed, and shoveled the material into an 85-gallon steel overpack drum (**Photograph No. 6** in **Attachment B**).

On February 6, 2012, at 8:00 a.m., R3 Environmental sealed two 330-gallon and six 270-gallon open and cracked totes with 6-millimeter (mm) Visqueen wrap and sealed the Visqueen with plastic bands and duct tape (**Photograph No. 7** in **Attachment B**). At 8:45 a.m., U.S. EPA and WESTON START identified a small spill of red liquid beneath a 270-gallon tote in the northwest region of the Site (**Photograph No. 8** in **Attachment B**). The red liquid had a field pH of 13 standard units (SU). Polychem Services secured the leaking tote by transferring it inside the facility building. Polychem Services stated that it will pump the contents of the leaking tote to a secure tote. Oil-Dri absorbent was applied to the spill area, and R3 Environmental scraped the material into a 55-gallon drum (**Photograph No. 9** in **Attachment B**). At 9:30 a.m., R3 Environmental secured lids on four unlabeled, leaking, 55-gallon steel drums in the northeast region of the Site belonging to Polychem Services. At 12:30 p.m., R3 Environmental used a fork lift to place one leaking 55-gallon drum into an 85-gallon steel overpack drum. At 1:00 p.m., R3 Environmental secured lids on 13 open 55-gallon steel drums in the northwest region of the Site (**Photograph No. 10** in **Attachment B**). At 2:00 p.m., R3 Environmental scraped contaminated Oil-Dri absorbent from the area of pooled oily product and

water in the northwest region of the Site into two 55-gallon steel drums. Additionally, R3 Environmental installed an absorbent boom along the northwest fenceline downgradient from oil-contaminated asphalt in the area of the drums that had been leaking (**Photograph No. 11** in **Attachment B**).

In total, 60 drums from the west and northwest regions of the Site were overpacked, 17 open drums from the northwest and northeast regions of the Site were secured with lids, and 8 open totes from the west region of the Site were secured with 6-mm Visqueen wrap. Open and leaking containers that were not secured contained non-hazardous solid wastes or rain water.

CONCLUSIONS

On February 1, 3, and 6, 2012, U.S. EPA and WESTON START responded to the Polychem Services Site ER at 374 East Joe Orr Road in Chicago Heights, Illinois. The ER was initiated after WESTON START identified the presence of leaking drums containing ignitable, corrosive, and toxic wastes, and surface water containing VOCs flowing from the Site to an adjacent storm sewer.

During the ER, Polychem Services contractors overpacked 60 leaking and damaged drums, secured lids on 17 open drums, and secured 8 open totes. Open and leaking containers not secured contained non-hazardous solid wastes or rain water. Additionally, Polychem Services contractors installed a soil berm and an absorbent boom along the northwest fenceline of the Site where surface water runoff from the northwest drum staging area had been flowing into a storm sewer and applied Oil-Dri to an area where oily product had been accumulating around leaking and open drums.

Over 900 drums and 700 totes remain at the Site, hundreds suspected to contain thousands of gallons of hazardous substances, pollutants, and flammables. Of these containers, approximately 671 reportedly belong to Heartland Polymer. Numerous containers and drums are in poor condition as evident by cracking, bulging, and solar damage. Several of the totes at the site are in a degraded condition (evidence of cracks and damaged integrity). There is a possibility that these containers will fail in the next few months. The threat of release from these containers and threat to public health and the environment remains high at the Site and additional response actions are necessary. Documentation for the aforementioned containers is in the Site Assessment Report.

This letter report serves as the final deliverable for this TDD. WESTON START anticipates no further activities under this TDD. If you have any questions or comments about the report or need additional copies, please contact me at (312) 424-3300.

Sincerely,
WESTON SOLUTIONS, INC.

Lisa Graczyk
WESTON START Project Manager

Attachments:
A – Figures
B – Photographic Documentation
C – Tables

cc: WESTON START DCN File

ATTACHMENT A
FIGURES

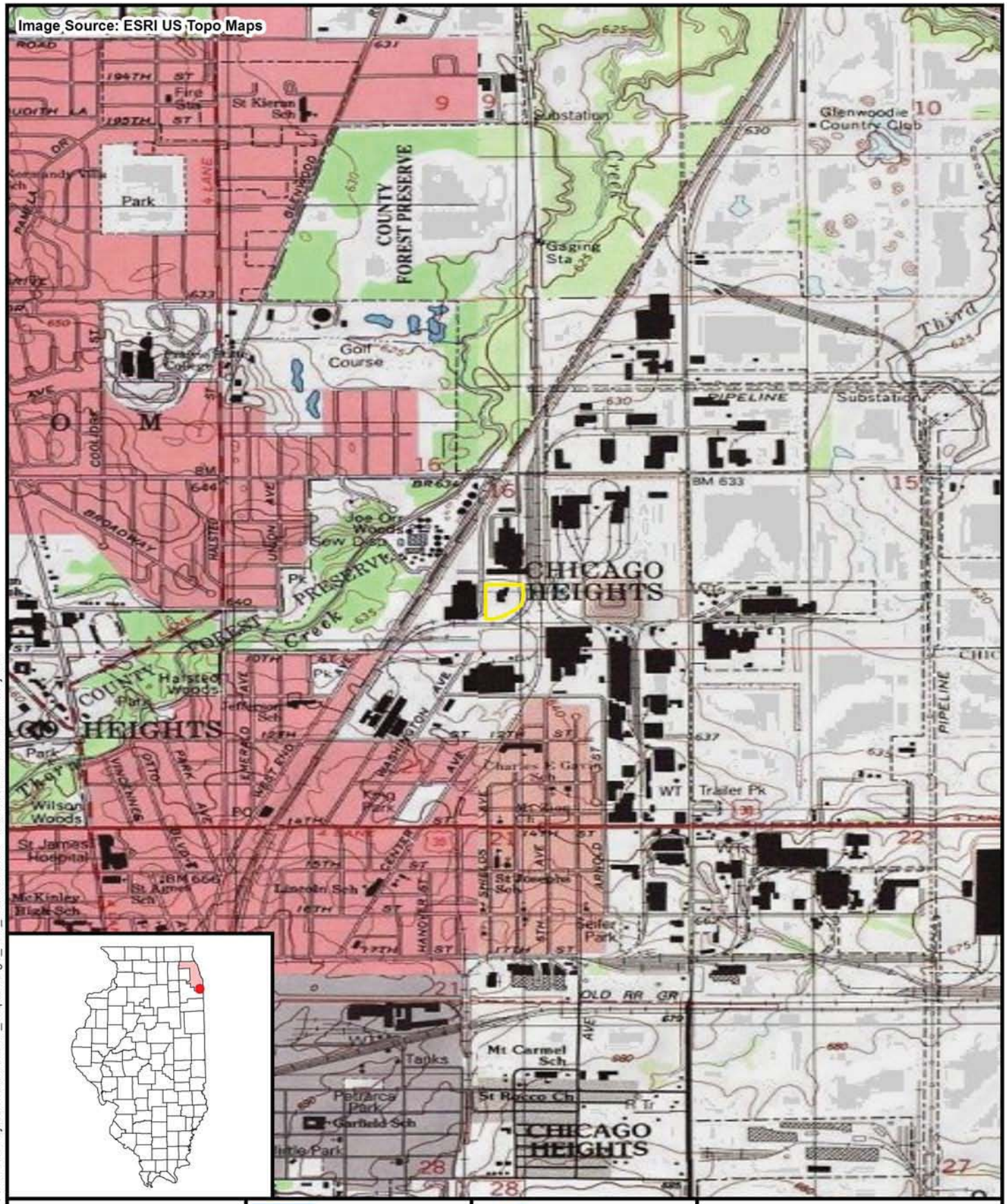

Figure 1
Site Location Map
Polychem Services Site
Chicago Heights, Cook County, Illinois

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FILE: D:\Polychem\mxd\Letter_Report\Fig2_Site_Features.mxd 3/2/2012 9:59:07 AM mejacm

Legend

- Site Zones
- Site Boundary

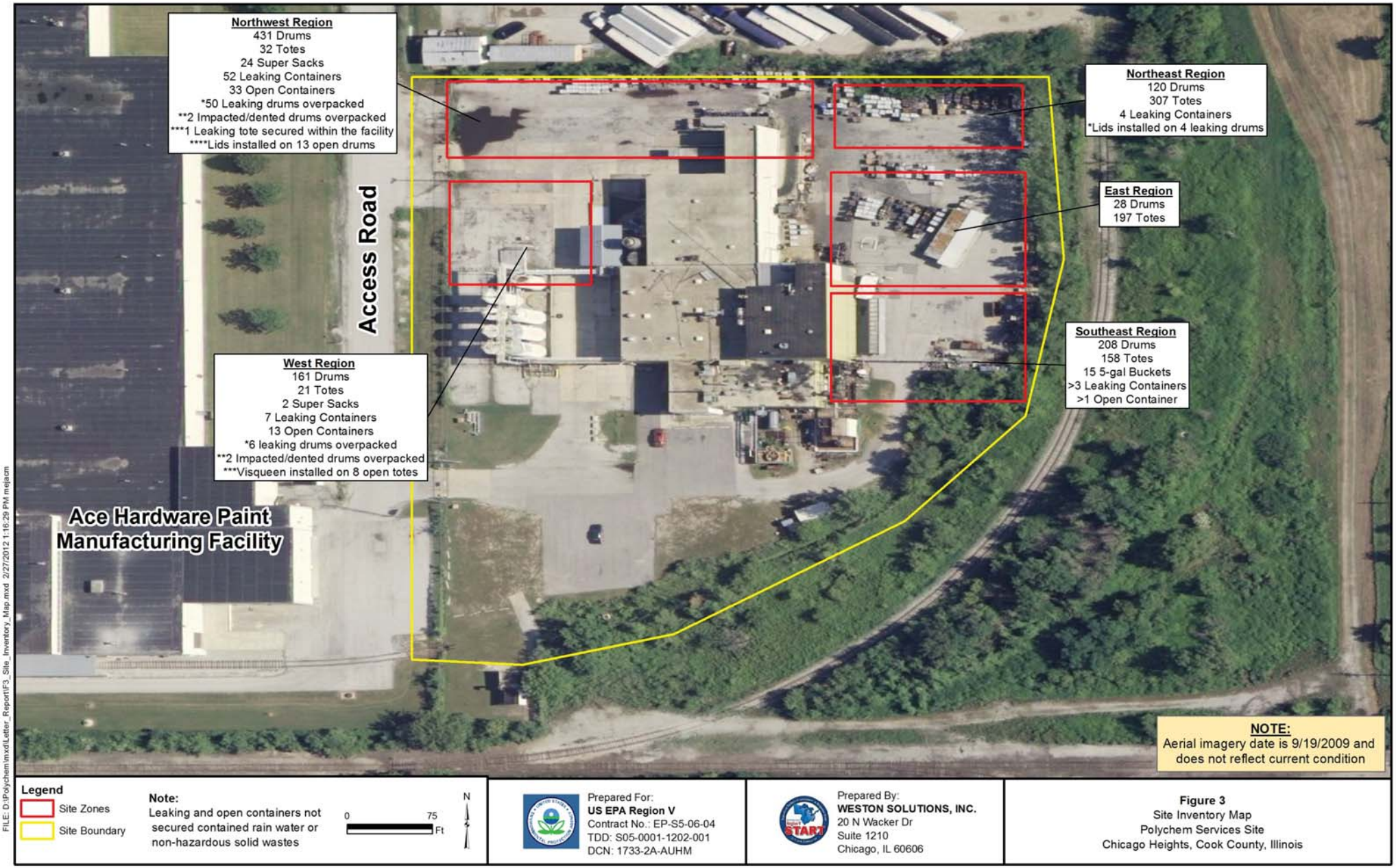
0 75 Ft

N

Prepared For:
US EPA Region V
Contract No.: EP-S5-06-04
TDD: S05-0001-1202-001
DCN: 1733-2A-AUHM

Prepared By:
WESTON SOLUTIONS, INC.
20 N Wacker Dr
Suite 1210
Chicago, IL 60606

Figure 2
Site Features Map
Polychem Services Site
Chicago Heights, Cook County, Illinois



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Legend

- Site Zones
- Site Boundary

Note:
Leaking and open containers not secured contained rain water or non-hazardous solid wastes

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Figure 3
Site Inventory Map
Polychem Services Site
Chicago Heights, Cook County, Illinois

ATTACHMENT B
PHOTOGRAPHIC DOCUMENTATION

Site: Polychem Services Site
Photograph No.: 1 **Date**: 2/1/12
Direction: Southeast **Photographer**: David Sena
Subject: Chemical conversion facility and staged drums in northwest region of the Site

Site: Polychem Services Site
Photograph No.: 2 **Date**: 2/1/12
Direction: West **Photographer**: David Sena
Subject: Soil berm and absorbent boom along Site's west fenceline

Site: Polychem Services Site
Photograph No.: 3 **Date**: 2/1/12
Direction: North **Photographer**: David Sena
Subject: Oil-Dri absorbent applied to area of pooled product leaking from 55-gallon drums

Site: Polychem Services Site
Photograph No.: 4 **Date**: 2/3/12
Direction: South **Photographer**: David Sena
Subject: Leaking 55-gallon drum labeled “Plant Solvent” and “Flammable” being placed into an 85-gallon steel overpack drum

Site: Polychem Services Site
Photograph No.: 5 **Date**: 2/3/12
Direction: Northwest **Photographer**: David Sena
Subject: Damaged 55-gallon drum being placed into an 85-gallon steel overpack drum

Site: Polychem Services Site
Photograph No.: 6 **Date**: 2/3/12
Direction: Northwest **Photographer**: David Sena
Subject: : Shoveling and disposal of Oil-Dri absorbent used to clean a spill of non-hazardous, under-reacted phenolic resin from 55-gallon steel drum in the northwest region of the Site

Site: Polychem Services Site
Photograph No.: 7 **Date**: 2/6/12
Direction: Northeast **Photographer**: David Sena
Subject: Open 270- and 330-gallon totes covered with 6-mm Visqueen and secured with plastic straps and duct tape.

Site: Polychem Services Site
Photograph No.: 8 **Date**: 2/6/12
Direction: North **Photographer**: David Sena
Subject: Spill of red caustic liquid from a 270-gallon tote in the northwest region of the Site

Site: Polychem Services Site
Photograph No.: 9 **Date**: 2/6/12
Direction: North **Photographer**: David Sena
Subject: Shoveling and disposal of Oil-Dri absorbent used to clean a spill of red caustic liquid from a 270-gallon tote in the northwest region of the Site

Site: Polychem Services Site
Photograph No.: 10 **Date**: 2/6/12
Direction: Northeast **Photographer**: David Sena
Subject: Lids being installed on open 55-gallon drums in the northwest region of the Site

Site: Polychem Services Site
Photograph No.: 11 **Date**: 2/6/12
Direction: Northwest **Photographer**: David Sena
Subject: Absorbent boom installed along the Site's west fenceline downgradient from oil-contaminated asphalt in the northwest region of the Site

ATTACHMENT C
TABLES

Table 1
Leaking Container and Surface Water Analytical Results Summary Table
Polychem Services Site
Chicago Heights, Cook County, Illinois

		Laboratory Sample ID	1201628-04	1201628-08	1201628-06	1201628-10	1201628-01
		Matrix	Waste Liquid	Waste Liquid	Waste Liquid	Waste Liquid	Waste Solid
		Location ID	WL-08	WL-11	WL-12	WL-13	WS-03
		Sampling Date	1/26/2012	1/26/2012	1/26/2012	1/26/2012	1/26/2012
		Field Sample ID	PS-WL08-012612	PS-WL11-012612	PS-WL12-012612	PS-WL13-012612	PS-WS03-012612
Parameter	**Unit**	**Regulatory Limit**					
pH	SU	≤ 2 or ≥ 12.5	6	6.45	7	6.4	6
Flashpoint	°F	< 140	NA	> 140	**84**	**108**	**120**
TCLP VOCs							
2-Butanone	mg/L	200	0.2 U	1000 U	**800**	5000 U	5000 U
Benzene	mg/L	0.5	0.02 U	100 U	**700**	500 U	500 U
TCL VOCs							
4-Methyl-2-pentanone	mg/L or mg/kg	NA	25 U	1400	250 U	10000 U	25 U
Benzene	mg/L or mg/kg	NA	5 U	300	50 U	2000 U	5 U
Ethylbenzene	mg/L or mg/kg	NA	94	36000	12000	3500	450
Isopropylbenzene	mg/L or mg/kg	NA	7.3	3000	780	3000	28
Styrene	mg/L or mg/kg	NA	13	100 U	50 U	2000 U	5 U
Toluene	mg/L or mg/kg	NA	62	4100	960	2000 U	13
Xylenes, total	mg/L or mg/kg	NA	330	160000	54000	14000	1100
TCL SVOCs							
1,1-Biphenyl	mg/L or mg/kg	NA	310	0.043 U	0.5 U	0.49 U	0.44 U
Acetophenone	mg/L or mg/kg	NA	96	0.0086 U	670	2200	0.089 U
Anthracene	mg/L or mg/kg	NA	700	0.043 U	0.5 U	0.49 U	0.44 U
Phenanthrene	mg/L or mg/kg	NA	590	0.043 U	0.5 U	0.49 U	0.44 U
Phenol	mg/L or mg/kg	NA	160	1000	0.5 U	0.49 U	0.44 U
Pyrene	mg/L or mg/kg	NA	230	0.043 U	0.5 U	0.49 U	0.44 U
PAHs							
2-Methylnaphthalene	mg/L	NA	NA	NA	NA	NA	NA
Anthracene	mg/L	NA	NA	NA	NA	NA	NA
Naphthalene	mg/L	NA	NA	NA	NA	NA	NA
Phenanthrene	mg/L	NA	NA	NA	NA	NA	NA
TAL Metals							
Aluminum	mg/L	NA	0.5 U	NA	NA	NA	NA
Antimony	mg/L	NA	0.25 U	NA	NA	NA	NA
Arsenic	mg/L	NA	0.25 U	NA	NA	NA	NA
Barium	mg/L	NA	0.25 U	NA	NA	NA	NA
Cadmium	mg/L	NA	0.1 U	NA	NA	NA	NA
Calcium	mg/L	NA	69	NA	NA	NA	NA

Table 1
Leaking Container and Surface Water Analytical Results Summary Table
Polychem Services Site
Chicago Heights, Cook County, Illinois

		Laboratory Sample ID	1201628-04	1201628-08	1201628-06	1201628-10	1201628-01
		Matrix	Waste Liquid	Waste Liquid	Waste Liquid	Waste Liquid	Waste Solid
		Location ID	WL-08	WL-11	WL-12	WL-13	WS-03
		Sampling Date	1/26/2012	1/26/2012	1/26/2012	1/26/2012	1/26/2012
		Field Sample ID	PS-WL08-012612	PS-WL11-012612	PS-WL12-012612	PS-WL13-012612	PS-WS03-012612
Parameter	**Unit**	**Regulatory Limit**					
Chromium	mg/L	NA	0.25 U	NA	NA	NA	NA
Cobalt	mg/L	NA	0.25 U	NA	NA	NA	NA
Copper	mg/L	NA	0.25 U	NA	NA	NA	NA
Iron	mg/L	NA	4 U	NA	NA	NA	NA
Lead	mg/L	NA	0.25 U	NA	NA	NA	NA
Magnesium	mg/L	NA	10 U	NA	NA	NA	NA
Manganese	mg/L	NA	0.25 U	NA	NA	NA	NA
Nickel	mg/L	NA	0.25 U	NA	NA	NA	NA
Potassium	mg/L	NA	10 U	NA	NA	NA	NA
Sodium	mg/L	NA	24	NA	NA	NA	NA
Vanadium	mg/L	NA	0.25 U	NA	NA	NA	NA
Zinc	mg/L	NA	0.5 U	NA	NA	NA	NA
Mercury	mg/L	NA	0.01 U	NA	NA	NA	NA

Notes:
1) Shaded and bolded results exceed the hazardous waste regulatory limits in Title 40 of the Code of Federal Regulations, Part 261, Subpart C.
2) Only detected parameters displayed

°F = Degree Fahrenheit
< = Less than
≤ = Less than or equal to
> = Greater than
≥ = Greater than or equal to
ID = Identification
mg/L = Milligrams per liter
mg/kg = milligrams per kilogram
NA = Not applicable
PAH = Polycyclic aromatic hydrocarbon
SVOC = Semi-volatile compound
TAL = Total Analyte List
TCL = Target Compound List
TCLP = Toxicity Characteristic Leaching Procedure
U = Non-detect
VOC = Volatile organic compound

Table 1
Leaking Container and Surface Water Analytical Results Summary Table
Polychem Services Site
Chicago Heights, Cook County, Illinois

		Laboratory Sample ID	1201628-03
		Matrix	Surface Water
		Location ID	W-01
		Sampling Date	1/25/2012
		Field Sample ID	PS-W01-012512
Parameter	**Unit**	**Regulatory Limit**	
pH	SU	≤ 2 or ≥ 12.5	7.32
Flashpoint	°F	< 140	NA
TCLP VOCs (mg/L)			
2-Butanone	mg/L	200	NA
Benzene	mg/L	0.5	NA
TCL VOCs			
4-Methyl-2-pentanone	mg/L or mg/kg	NA	0.005 U
Benzene	mg/L or mg/kg	NA	0.001 U
Ethylbenzene	mg/L or mg/kg	NA	0.013
Isopropylbenzene	mg/L or mg/kg	NA	0.0015
Styrene	mg/L or mg/kg	NA	0.001 U
Toluene	mg/L or mg/kg	NA	0.0012
Xylenes, total	mg/L or mg/kg	NA	0.07
TCL SVOCs			
1,1-Biphenyl	mg/L or mg/kg	NA	0.005 U
Acetophenone	mg/L or mg/kg	NA	0.0062
Anthracene	mg/L or mg/kg	NA	0.0068
Phenanthrene	mg/L or mg/kg	NA	0.0096
Phenol	mg/L or mg/kg	NA	0.036
Pyrene	mg/L or mg/kg	NA	0.05 U
PAHs			
2-Methylnaphthalene	mg/L	NA	0.0006
Anthracene	mg/L	NA	0.008
Naphthalene	mg/L	NA	0.00034
Phenanthrene	mg/L	NA	0.0078
TAL Metals			
Aluminum	mg/L	NA	18
Antimony	mg/L	NA	0.0064
Arsenic	mg/L	NA	0.013
Barium	mg/L	NA	0.35
Cadmium	mg/L	NA	0.0037
Calcium	mg/L	NA	140

Table 1
Leaking Container and Surface Water Analytical Results Summary Table
Polychem Services Site
Chicago Heights, Cook County, Illinois

		Laboratory Sample ID	1201628-03
		Matrix	Surface Water
		Location ID	W-01
		Sampling Date	1/25/2012
		Field Sample ID	PS-W01-012512
Parameter	**Unit**	**Regulatory Limit**	
Chromium	mg/L	NA	0.19
Cobalt	mg/L	NA	0.0095
Copper	mg/L	NA	0.14
Iron	mg/L	NA	38
Lead	mg/L	NA	0.17
Magnesium	mg/L	NA	57
Manganese	mg/L	NA	0.5
Nickel	mg/L	NA	0.041
Potassium	mg/L	NA	16
Sodium	mg/L	NA	1800
Vanadium	mg/L	NA	0.053
Zinc	mg/L	NA	2.5
Mercury	mg/L	NA	0.00024

Notes:
1) Shaded and bolded results exceed the hazardous waste regulatory limits in Title 40 of the Code of Federal Regulations, Part 261, Subpart C.
2) Only detected parameters displayed

°F = Degree Fahrenheit
< = Less than
≤ = Less than or equal to
> = Greater than
≥ = Greater than or equal to
ID = Identification
mg/L = Milligrams per liter
mg/kg = milligrams per kilogram
NA = Not applicable
PAH = Polycyclic aromatic hydrocarbon
SVOC = Semi-volatile compound
TAL = Total Analyte List
TCL = Target Compound List
TCLP = Toxicity Characteristic Leaching Procedure
U = Non-detect
VOC = Volatile organic compound

Table 2
Overpacked Drum Summary Table
Polychem Services Site
Chicago Heights, Cook County, Illinois

U.S. EPA CID Drum ID No.	Heartland Polymer Drum ID No.	Region of Site	Drum Volume and Construction	Drum Condition	Labels and Markings
C007	751	West	55-gal. steel	Leaking	"Flammable"
C024	706	West	55-gal. steel	Leaking	"Flammable," "Hazardous," and "Epoxy Resin"
A041	-	West	55-gal. steel	Leaking	"Flammable"
A040	677	West	55-gal. steel	Leaking	"Flammable"
A086	164	West	55-gal. steel	Leaking	"Hazardous" and "Flammable"
A126	650	West	55-gal. steel	Leaking	"Hazardous" and "Flammable"
B004	-	Northwest	55-gal. steel	Leaking	"Flammable" and "Styrene"
D074	-	Northwest	30-gal. poly	Leaking and open	"Corrosive" and "Sodium metabisulfite"
D072	-	Northwest	30-gal. poly	Leaking and open	"Corrosive" and "Sodium metabisulfite"
B113	-	Northwest	55-gal. steel	Leaking	Unlabeled and covered in garbage bag
B102	-	Northwest	55-gal. steel	Leaking	"Flammable" and "Plant Solvent"
B107	-	Northwest	55-gal. steel	Leaking	Unlabeled
B103	-	Northwest	55-gal. steel	Leaking	Unlabeled
-	-	Northwest	55-gal. steel	Leaking	Unlabeled and covered in garbage bag
A277	709	Northwest	55-gal. steel	Leaking	"Flammable"
A278	-	Northwest	55-gal. steel	Leaking	"Flammable" and "Mineral Spirits"
A344	434	Northwest	55-gal. steel	Leaking	Unlabeled
A304	-	Northwest	55-gal. steel	Leaking	"Non-Hazardous" and "Epoxy Resin"
A316	-	Northwest	55-gal. steel	Leaking	Unlabeled
A398	-	Northwest	55-gal. steel	Leaking	Unlabeled
A263	-	Northwest	55-gal. steel	Leaking	Unlabeled
A362	-	Northwest	55-gal. steel	Leaking	Unlabeled
A400	-	Northwest	55-gal. steel	Leaking	Unlabeled
A361	-	Northwest	55-gal. steel	Leaking	Unlabeled
A303	-	Northwest	55-gal. steel	Leaking	"Non-Hazardous" and "Epoxy Resin"
A404	-	Northwest	55-gal. steel	Leaking	Unlabeled
A410	-	Northwest	55-gal. steel	Leaking	Unlabeled
A409	-	Northwest	55-gal. steel	Leaking	Unlabeled
A405	-	Northwest	55-gal. steel	Leaking	Unlabeled
A385	-	Northwest	55-gal. steel	Leaking	Unlabeled
A383	-	Northwest	55-gal. steel	Leaking	Unlabeled
A382	-	Northwest	55-gal. steel	Leaking	Unlabeled
A379	-	Northwest	55-gal. steel	Leaking	Unlabeled
A381	-	Northwest	55-gal. steel	Leaking	Unlabeled
A384	-	Northwest	55-gal. steel	Leaking	Unlabeled
A377	-	Northwest	55-gal. steel	Leaking	Unlabeled
A376	-	Northwest	55-gal. steel	Leaking	Unlabeled
A375	-	Northwest	55-gal. steel	Leaking	Unlabeled
A386	-	Northwest	55-gal. steel	Leaking	Unlabeled
A217	154	Northwest	55-gal. steel	Leaking	"Hazardous"
A237	-	Northwest	55-gal. steel	Damaged	"HP Polymers"
A194	-	Northwest	55-gal. steel	Leaking	"Acetone"
A460	-	Northwest	55-gal. steel	Leaking	Unlabeled
A443	-	Northwest	55-gal. steel	Leaking	Unlabeled
A459	-	Northwest	55-gal. steel	Leaking	Unlabeled
A442	-	Northwest	55-gal. steel	Leaking	Unlabeled
A478	-	Northwest	55-gal. steel	Leaking	Unlabeled
A355	-	Northwest	55-gal. steel	Leaking	Unlabeled
A312	-	Northwest	55-gal. steel	Leaking	Unlabeled

Table 2
Overpacked Drum Summary Table
Polychem Services Site
Chicago Heights, Cook County, Illinois

U.S. EPA CID Drum ID No.	Heartland Polymer Drum ID No.	Region of Site	Drum Volume and Construction	Drum Condition	Labels and Markings
A354	-	Northwest	55-gal. steel	Leaking	Unlabeled
A313	-	Northwest	55-gal. steel	Leaking	Unlabeled
A353	-	Northwest	55-gal. steel	Leaking	Unlabeled
A314	-	Northwest	55-gal. steel	Leaking	Unlabeled
A315	-	Northwest	55-gal. steel	Leaking	Unlabeled
A352	-	Northwest	55-gal. steel	Leaking	Unlabeled
A095	470	West	55-gal. steel	Damaged	"Hazardous"
A096	265	West	55-gal. steel	Damaged	Unlabeled
A441	572	Northwest	55-gal. steel	Damaged	"Corrosive" and "Non-Hazardous"
A433	-	Northwest	55-gal. steel	Leaking	Unlabeled
A430	-	Northwest	55-gal. steel	Leaking	"Flammable"

Notes:
- = Not applicable
CID = Criminal Investigation Division
gal. = Gallon
Heartland Polymer = Heartland Polymer, Incorporated
ID = Identification
Poly = Polyethylene
U.S. EPA = United States Environmental Protection Agency